

# Renewable Energy Approval Process

**Presenter: Barbara Sylvestre-Williams**

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# This Presentation Will...



Provide an overview of the Renewable Energy Approval (REA) process and requirements for renewable energy projects in Ontario.



# Context

- The *Green Energy and Green Economy Act* received Royal Assent on May 14, 2009.
- Renewable Energy Approval Regulation under the *Environmental Protection Act* (O. Reg. 359/09) brought into force on September 24, 2009.
- The Renewable Energy Approval (REA) is a coordinated environmental approval for renewable energy generation projects.



# Key Features of the *Green Energy Act*

- **Renewable Energy Facilitation Office** - One-window contact and advocate for Developers, Coordinate, track, monitor progress of projects
- **Feed in Tariff (FIT)** – set revenue stream for Developers, REA will be a requirement of their “Notice to Proceed” for the FIT contract
- **Renewable Energy Approval (REA)**
  - Streamlined environmental approval process for projects with an approval service guarantee coordinated with MOE, MNR, MTO, MTC and Conservation Authorities
  - up front province identification of aboriginal communities that applicants must consult (coordinated with MEI, MNR, MOE, MAA)

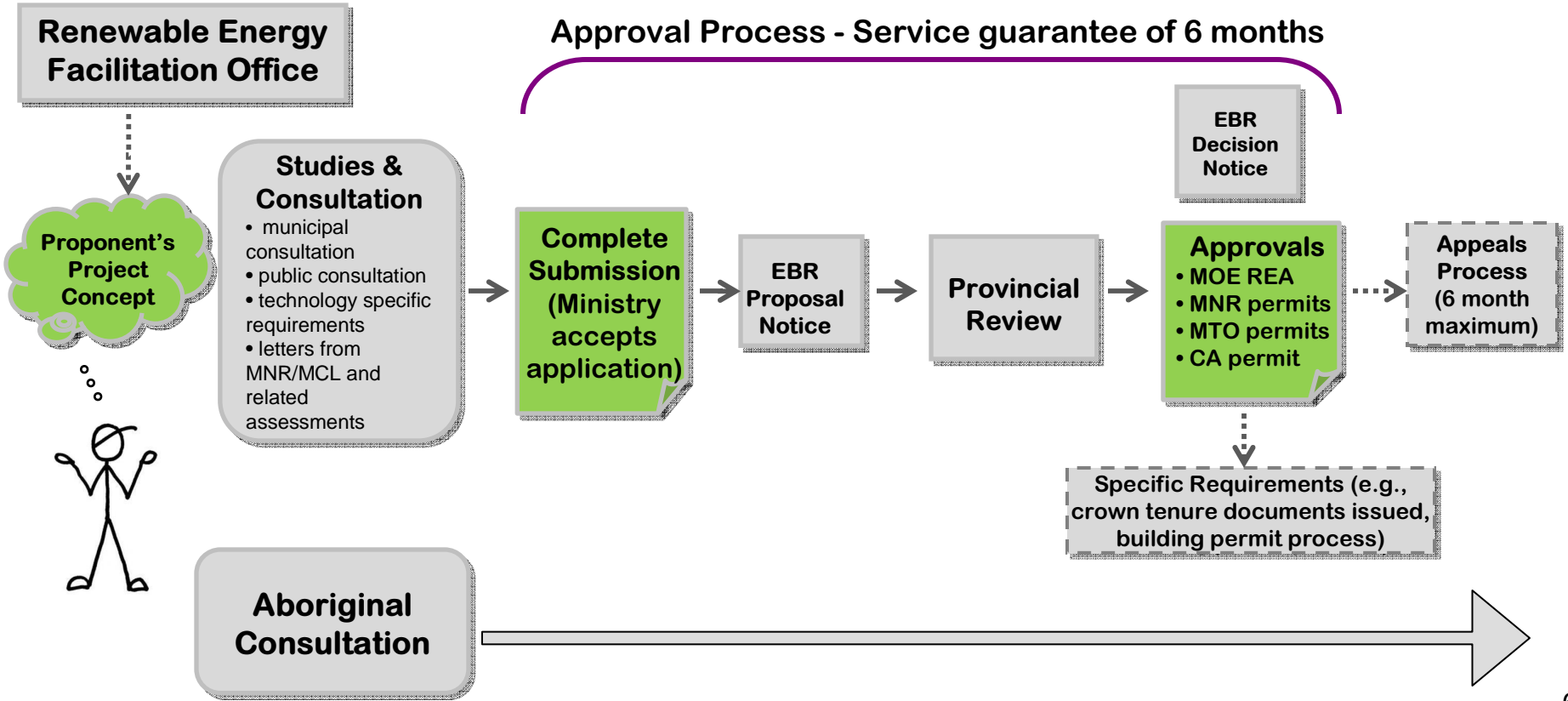


# REA Process Principles: Concepts for an Efficient and Effective Approval Process

- **Emitter Accountability** as applicants are responsible for their emissions and must meet MOE requirements. A Complete Submission is required in order for applications to be accepted.
- **Regulatory Efficiency** as MOE commitment to approval process review for improvement and enhancement via guidance, screening applications, new ways of doing business and outreach to the regulated community
- **Enhanced coordination** of application reviews through all required ministries and REFO.
- **Focused Review** with MOE staff following an established review standard to produce, review or audit technical information. MOE must demonstrate a fair and consistent approach and hold applicants accountable.



# Renewable Energy Approval Process



# REA Application Submission Potential Requirements\*



- Project Description Report
- Construction Plan
- Design and Operations Plan
- Decommissioning Plan
- Public Notice
- Consultation Report  
(including summaries of local Aboriginal, public and municipal consultation)
- Cultural Heritage Summary
- Natural Heritage Summary
- Water Bodies Summary
- Provincial Policy Plan Summary

\*Table 1 of Regulation 359/09



# Additional Reports



- Depending on the type of renewable energy technology, project size, or other features of the facility design, additional technical reports may be required as part the REA application. These include:
  - Effluent Management Plan Report
  - Emission Summary and Dispersion Modelling Report
  - Environmental Impact Study Report
  - Hydrogeological Assessment Report
  - Noise Study
  - Odour Study
  - Property Line Setback Assessment Report
  - Surface Water Assessment Report
  - Water Bodies Report



# What's In, What's Out



- **Wind Facilities**

- Over 3kW but less than 50kW (streamlined requirements)
- Over 50kW (including setbacks)
- All off-shore wind projects



- **Solar Facilities**

- Ground mounted over 10kW
- No approval required for rooftop or wall mounted of any size
- Prime agricultural land restrictions within the FIT contract



- **Bio-energy Facilities**

- Defined in the Green Energy Act as biomass, biogas or biofuel
- Can be anaerobic digestion or thermal treatment facilities
- No approval required for farm-based operations addressed under the Nutrient Management Act

- **Waterpower Facilities**

- Does not require an REA; existing Class EA and MOE/MNR approvals still apply



# Wind Project Requirements

- REA is required for all wind projects >3kW
- Application requirements (studies, reports as applicable)
- Noise Study
- Receptor setbacks, property and road setbacks
- Natural heritage provisions
  - Development prohibitions – surface water, Areas of Natural and Scientific Interest (ANSI)
- Cultural heritage provisions

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## Wind Projects Noise Receptor Setbacks

- Applicants can conduct a noise study to move closer than the setback in the matrix, up to a minimum of 550m
- Only exception for the 550m noise setback is demonstrated ambient noise levels due to road traffic that exceeds 40dBA
- The setback does not apply to participating receptors
- A noise receptor is “participating” if a part of the facility is located on their property and there is some kind of agreement between the receptor and the facility owner





# Wind Project Noise Matrix



- Provides how far large projects will have to be located from residences and other receptors, including a **minimum setback of 550 m**

Number of Wind Turbines	Setback in metres (m) from closest Point of Reception corresponding to wind turbine Sound Power Levels in decibels (dBA)				
	102 dBA	103 - 104 dBA	105 dBA	106 - 107 dBA	> 107 dBA
1 – 5 turbines	550 m	600 m	850 m	950 m	Noise study required
6 - 10 turbines	650 m	700 m	1000 m	1200 m	
11 - 25 turbines	750 m	850 m	1250 m	1500 m	
26+ turbines	Noise study required				

Proposed setbacks in the noise matrix are consistent with the Ministry of the Environment's *Noise Guidelines for Wind Farms* (October 2008) and the noise level limit of 40 dBA at the Point of Reception regardless of wind speed.



## Wind Project Property and Road Setbacks

- Setbacks from property lines equal to, or greater than the hub height (approx. 80m)
  - Applicants can submit a property line assessment to reduce the setback to a minimum of blade length plus 10m
- Setbacks from roads/railways equal to or greater than blade length plus 10 M (approx. 50m)
  - Developed in coordination with MTO



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# Solar Project Requirements

- REA is required for all ground mounted solar projects >10 kW
- Applications requirements (studies, reports as applicable)
- Noise study
- **Natural heritage provisions** - Development prohibitions – surface water, Areas of Natural and Scientific Interest (ANSI), setbacks from significant woodlots, etc.
- Cultural heritage provisions





# Solar Projects Noise Study

- Applicants are required to submit a noise study as part of their application for a REA
- The noise study must assess the potential impacts at nearby receptors (e.g. residence) from sound emitted by electrical equipment (e.g. inverters, transformers)
- The application and noise study is required to demonstrate that the solar facility, as designed, can meet a 40 decibel noise level





# Biomass Project Requirements

**Anaerobic Digestion Facilities:** 3 Classes based on location and types of waste feed material

- **Operational Requirements:**

- Class 1 and 2 On Farm Anaerobic Digestion Facilities**

- **250m** from nearest odour receptor; or
    - **125m** from nearest odour receptor, if generating  $\leq 500$  kW, and following 4 Best Mgmt Practices (BMPs); or
    - **No prescribed setbacks, if generating  $> 500$  kW and submit the following studies:** Emission Summary and Dispersion Modelling Rpt; Noise, and Odour Studies

- Class 2 Anaerobic Digestion Facilities must submit:**

- Effluent Management Plan Rpt; Hydrogeological Assessment Rpt; and Surface Water Assessment Rpt

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# Biomass Project Requirements (cont'd)



## Anaerobic Digestion Facilities – Class 3:

**Must be designed:** With a gas storage cover as prescribed by the regulation and a high efficiency flare system; and

**Must submit:** Effluent Management Plan Report; Emission Summary and Dispersion Modelling Rpt; Hydrogeological Assessment Rpt; Noise Study; Odour Study; and Surface Water Assessment Rpt

(All Class 2 and 3 Anaerobic Digestion Facilities are subject to Financial Assurance requirements)

## Biogas facilities include:

- Generation facilities using biogas produced offsite
- Generation facilities using biogas produced onsite through means other than anaerobic digestion, such as landfill gas capture

**These facilities must submit:** Noise study; Emission Summary and Dispersion Modelling Rpt; and Odour study



## Biomass Project Requirements (cont'd)

**Thermal Treatment:** 3 classes based on types of feed material and the location

- **Operational Requirements**

**Class 1 (woodwaste only, any location) must submit:**

Effluent Management Plan Rpt; Emission Summary and Dispersion Modelling Rpt (if not located on-farm); Noise Study (if not located on-farm); and Surface Water Assessment Rpt

**Class 2 (any biomass, on-farm) must submit:**

Effluent Management Plan Rpt; and Surface Water Assessment Rpt

**Class 3 (any biomass, off-farm) must submit:**

Effluent Management Plan Rpt; Emission Summary and Dispersion Modelling Rpt; Hydrogeological Assessment Rpt; Noise Study; and Surface Water Assessment Rpt

All Class 2 and 3 Thermal Treatment Facilities are subject to Financial Assurance requirements

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# Project Description Report



- Describes the scope and scale of the project, environmental impacts expected to be encountered and mitigation taken as part of the project
- Draft report required by the Ministry of the Environment at the beginning of the process to help determine required aboriginal consultation
- Draft report will be the key document throughout consultation with Aboriginal, public, municipal parties.
- Typical content could include:
  - Project description in terms of energy sources, renewable energy generation facility class, project activities, nameplate capacity and land ownership.
  - Description of any potential environmental effects on heritage and archaeological resources, natural heritage resources, local resources and infrastructure and areas protected under the provincial plans and policies.

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# Construction Plan Report



- Describes the construction and installation activities as well as mitigation strategies for any potential negative environmental effects
- Typical content could include:
  - How excavation activities will be conducted to prevent stormwater impacts
  - How dust and noise impacts will be minimized or mitigated
  - How any waste generated during construction will be managed
  - Details on how all generation equipment and construction materials will be transported onto the site
- This is an important draft report for municipal consultation

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# Design & Operations Report



- Principal technical document providing the details of the project design and engineering
- Report contents:
  - Site Plan
  - Facility Design Plan
  - Facility Operations Plan
  - Environmental Effects Monitoring Plan
  - Emergency Response and Communications Plan
- Purpose of the report is to show how the facility will:
  - meet requirements of O. Reg. 359/09 such as setback distances
  - be designed to avoid and mitigate environmental effects
- Report refers to conclusions drawn in other technical reports

# Decommissioning Plan Report



- Outlines how the facility will be decommissioned at the end of the project life
- Typical content will include:
  - Procedures for dismantling or demolishing the facility, including decommissioning during construction (abandonment of project); decommissioning after ceasing operation;
  - Restoration of lands negatively affected by the facility; and
  - Procedures for managing excess materials and waste that will be generated during the decommissioning activities.
- Will include financial assurance requirements if a bio-energy facility
  - Ministry of the Environment has the authority to ask for financial assurance for a project as a condition of approval
- This is another draft report that will be important in municipal consultation

# Consultation Report



- Outlines consultation with the public, Aboriginal communities\* and local municipalities and boards in accordance with the consultation requirements outlined in the REA Regulation 359/09.
- Typical content will include:
  - Documentation of applicant requirements to: notify the public of meetings, record meeting results with interested and affected stakeholders, and outline changes made to the project design as a result of consultation.
  - Ensure interested and affected parties understand they can submit comments directly to the MOE through the Environmental Registry when the application is posted, and that their comments will be considered by the MOE prior to making a decision on the application.

\* An Aboriginal consultation guidance document is currently being developed.

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# Guidance For Proponents

- Plain language guide, *Provincial Approvals for Renewable Energy Projects*, available on the Ministry website:  
[http://www.ene.gov.on.ca/en/business/green-energy/docs/REP\\_Guide.pdf](http://www.ene.gov.on.ca/en/business/green-energy/docs/REP_Guide.pdf)
- Six technical bulletins have been posted for a 90-day comment period (Mar 1 – May 30) EBR Registry Number 010-9235: [www.ebr.gov.on.ca](http://www.ebr.gov.on.ca)
- Technical bulletins describe contents of major reports required as part of an application under O.Reg.359/09
  - Project Description Report
  - Design and Operations Report
  - Construction Plan Report
  - Decommissioning Plan Report
  - Setback requirements for wind turbines
  - Consultation Report





# More Information

- **MOE website** has general information and detailed application requirements.
  - Fact sheets describing technology specific requirements, the consultation process, and a jurisdictional comparison.
  - *Guide: Provincial Approvals for Renewable Energy Projects*
  - Technical Bulletins on the EBR for consultation (more to follow)
- **Proponents considering project application for approval** - contact the MOE, Environmental Assessment and Approvals Branch:  
[eaabgen.moe@ontario.ca](mailto:eaabgen.moe@ontario.ca)
- **MEI's Renewable Energy Facilitation Office (REFO)** has general information on all aspects of bringing a renewable energy project to life.
  - [www.ontario.ca/greenenergyprojects](http://www.ontario.ca/greenenergyprojects).
  - 1-877-440-REFO (7336)
  - [REFO@ontario.ca](mailto:REFO@ontario.ca)